WHAT IS CLAIMED IS:

1. A liquid crystal display device, comprising:

a first substrate;

a second substrate;

a vertical alignment type liquid crystal layer provided between the first substrate and the second substrate;

voltage application means for applying a voltage across the liquid crystal layer;

a plurality of picture elements each including the liquid crystal layer whose orientation changes according to the voltage applied by the voltage application means, wherein:

the liquid crystal layer in each of the plurality of picture elements includes, at least in a presence of an applied voltage, a 4-divided domain including a first sub-domain, a second sub-domain, a third sub-domain and a fourth sub-domain which are arranged in this order in a predetermined direction and in each of which an orientation direction of liquid crystal molecules located in a vicinity of a center of the liquid crystal layer in the thickness direction is different from those of the other sub-domains;

for each 4-divided domain, the first substrate includes two first regions each having an orientation-regulating force for orienting the liquid crystal molecules of the liquid crystal layer in a first direction and a second

region provided between the two first regions and having an orientation-regulating force for orienting the liquid crystal molecules in a second direction that is opposite to the first direction, while the second substrate includes a third region having an orientation-regulating force for orienting the liquid crystal molecules in a third direction that crosses the first direction and a fourth region having an orientation-regulating force for orienting the liquid crystal molecules in a fourth direction that is opposite to the third direction; and

the first sub-domain is formed between one of the two first regions and the third region, the second sub-domain is formed between the second region and the third region, the third sub-domain is formed between the second region and the fourth region, and the fourth sub-domain is formed between the other one of the two first regions and the fourth region.

2. The liquid crystal display device of claim 1, wherein the first direction and the third direction are perpendicular to each other.

3. The liquid crystal display device of claim 1, wherein the liquid crystal layer in each of the plurality of picture elements includes, at least in a presence of an applied voltage, the 4-divided domain and an additional first sub-domain that is adjacent to the fourth sub-domain included in the 4-divided domain.

4. The liquid crystal display device of claim 3,

wherein a total area of the first sub-domain and the additional first sub-domain, an area of the second sub-domain, an area of the third sub-domain and an area of the fourth sub-domain are equal to one another for the liquid crystal layer in each of the plurality of picture elements.

5. The liquid crystal display device of claim 1, wherein the liquid crystal layer in each of the plurality of picture elements is substantially occupied by one 4-divided domain at least in a presence of an applied voltage.

6. The liquid crystal display device of claim 5, wherein respective areas of the first, second, third and fourth sub-domains are substantially equal to one another.

7. The liquid crystal display device of claim 1, wherein a relationship $x=y/n$ (n is a positive integer equal to or greater than 1) is satisfied, where x is a length of the second sub-domain in the predetermined direction and y is a length of each of the second region and the fourth region in the predetermined direction.

8. The liquid crystal display device of claim 1, wherein a relationship $P=4nx=2ny$ (n is a positive integer equal to or greater than 1) is satisfied, where P is a length of each of the plurality of picture elements in the predetermined direction, x is a length of the second sub-domain in the predetermined direction, and y is a length of each of the second region and the fourth region in the predetermined direction.

9. The liquid crystal display device of claim 1, wherein the plurality of picture elements are arranged in a matrix having rows and columns, and the predetermined direction is parallel to the columns.

10. The liquid crystal display device of claim 9, wherein the two first regions, the second region, the third region and the fourth region are formed parallel to the rows in a stripe pattern so as to lie on a row of picture elements among the plurality of picture elements.

11. The liquid crystal display device of claim 10, wherein a length of the second region in the column direction and a length of the fourth region in the column direction are equal to each other.

12. The liquid crystal display device of claim 11, wherein a length of each of the first, second, third and fourth sub-domains in the column direction is one half of the length of the second region in the column direction.

13. The liquid crystal display device of claim 1, wherein a display is produced in a normally black mode.

14. The liquid crystal display device of claim 13, further comprising a pair of polarizers arranged so as to oppose each other via the first and second substrates therebetween, and a phase difference compensator provided between the first substrate and one of the pair of polarizers corresponding to the first substrate and/or between the second substrate and the other one of the pair of polarizers

corresponding to the second substrate,

wherein a slow axis of the phase difference compensator is in a plane of the liquid crystal layer and is perpendicular to an absorption axis of closer one of the pair of polarizers.

15. A method for producing a liquid crystal display device, the liquid crystal display device comprising:

a first substrate;

a second substrate;

a vertical alignment type liquid crystal layer provided between the first substrate and the second substrate;

voltage application means for applying a voltage across the liquid crystal layer;

a plurality of picture elements each including the liquid crystal layer whose orientation changes according to the voltage applied by the voltage application means, wherein:

the liquid crystal layer in each of the plurality of picture elements includes, at least in a presence of an applied voltage, a 4-divided domain including a first sub-domain, a second sub-domain, a third sub-domain and a fourth sub-domain which are arranged in this order in a predetermined direction and in each of which an orientation direction of liquid crystal molecules located in a vicinity of a center of the liquid crystal layer in the thickness

direction is different from those of the other sub-domains;

for each 4-divided domain, the first substrate includes two first regions each having an orientation-regulating force for orienting the liquid crystal molecules of the liquid crystal layer in a first direction and a second region provided between the two first regions and having an orientation-regulating force for orienting the liquid crystal molecules in a second direction that is opposite to the first direction, while the second substrate includes a third region having an orientation-regulating force for orienting the liquid crystal molecules in a third direction that crosses the first direction and a fourth region having an orientation-regulating force for orienting the liquid crystal molecules in a fourth direction that is opposite to the third direction; and

the first sub-domain is formed between one of the two first regions and the third region, the second sub-domain is formed between the second region and the third region, the third sub-domain is formed between the second region and the fourth region, and the fourth sub-domain is formed between the other one of the two first regions and the fourth region, the method comprising the steps of:

injecting a liquid crystal material into a gap between the first substrate and the second substrate; and

after the injection step, holding the liquid crystal material at a temperature equal to or greater than a Tni

point of the liquid crystal material for a predetermined amount of time or longer and then cooling the liquid crystal material to normal temperature.